

COMPANION ANIMAL DECONTAMINATION TEAM

DESCRIPTION	A Companion Animal Decontamination Team provides companion animal intake, radiological assessment (if applicable), decontamination, and re-monitoring (if applicable)—followed by release to owners if animals are adequately clean or transfer to a longer-term holding facility if animals are persistently contaminated. For purposes of this document only, companion animals include pets, assistance animals, and service animals.
RESOURCE CATEGORY	Animal Emergency Response
RESOURCE KIND	Team
OVERALL FUNCTION	<p>This team manages the decontamination of companion animals after incidents involving hazardous materials, including debris, floodwaters, and radiological contamination. Specifically, this team:</p> <ol style="list-style-type: none"> 1. Sets up all equipment at a designated “warm zone” site 2. Accepts animals from their owners or caretakers for rapid triage (behavioral and health), identification, and initial monitoring; Note: In some radiological incidents, this team may ask owners to participate actively in decontaminating their animals, per incident policies; Owner participation is less likely in non-radiological incidents 3. Transfers severely injured or ill animals to veterinary medical personnel for stabilization prior to decontamination, if resources permit, according to incident policies 4. Decontaminates animals using techniques appropriate for contaminant, species, breed, environmental conditions, and available resources 5. Monitors and re-monitors animals after decontamination in radiological incidents 6. Releases adequately decontaminated animals to their owners, or transfers animals to emergency animal shelters if owners are not available to claim animals 7. Performs repeat decontamination on persistently contaminated animals, or transfers such animals to a designated holding area 8. Disposes of wastewater and other waste in accordance with incident policies
COMPOSITION AND ORDERING SPECIFICATIONS	<ol style="list-style-type: none"> 1. Discuss logistics for deploying this team, such as working conditions, length of deployment, security, lodging, transportation, and meals, prior to deployment 2. Requestor specifies desired capabilities for a single line of animal decontamination operations for a specific period 3. This team may require supporting utilities, including water, power, and sewer/wastewater disposal. For large-scale incidents, this team may require additional supplies, including Personal Protective Equipment (PPE), disposable leashes, pet collars, surfactant, drying towels, and other supplies. Requestor should discuss expected numbers of animals for decontamination and team supply needs before placing order 4. Particularly in radiological incidents, requestor should discuss whether this team will establish a second or even third decontamination line in which owners can bathe and dry their own animals, with monitoring, coaching, and supervision. Requestor may need to order additional single resources to support this option. Consider local jurisdictional policies and liability in decisions about owners decontaminating their own animals 5. Discuss whether the incident requires 24-hour operations and whether very large numbers of animals will need monitoring or decontamination, and order teams accordingly 6. Discuss any additional just-in-time training necessary to comply with incident policy

Each type of resource builds on the qualifications of the type below it. For example, Type 1 qualifications include the qualifications in Type 2, plus an increase in capability. Type 1 is the highest qualification level.

COMPONENT	TYPE 1	TYPE 2	TYPE 3	TYPE 4	NOTES
MINIMUM PERSONNEL PER TEAM	45	15	8	Not Specified	Not Specified

Resource Typing Definition for Environmental Response/Health and Safety
Animal Emergency Response

COMPONENT	TYPE 1	TYPE 2	TYPE 3	TYPE 4	NOTES
MANAGEMENT AND OVERSIGHT PERSONNEL PER TEAM	Same as Type 2, PLUS: 1 - National Incident Management System (NIMS) Type 1 Animal Emergency Response Team Leader (deputy)	Same as Type 3	1 - NIMS Type 1 Animal Emergency Response Team Leader	Not Specified	Not Specified
SUPPORT PERSONNEL PER TEAM	Same as Type 2, PLUS: 1 - NIMS Type 2 Veterinarian 1 - NIMS Type 1 Veterinary Assistant 1 - NIMS Type 2 Veterinary Assistant 1 - NIMS Type 1 Animal Behaviorist 4 - NIMS Type 2 Animal Decontamination Specialist 20 - NIMS Type 2 Animal Care and Handling Specialist 1 - Logistics Specialist	Same as Type 3, PLUS: 1 - NIMS Type 2 Veterinarian 1 - NIMS Type 2 Veterinary Assistant 2 - NIMS Type 2 Animal Decontamination Specialist 2 - NIMS Type 2 Animal Care and Handling Specialist 1 - Logistics Specialist	1 - NIMS Type 1 Veterinary Assistant 1 - NIMS Type 1 Animal Care and Handling Specialist 5 - NIMS Type 2 Animal Care and Handling Specialist	Not Specified	1. Add drivers based on the number of vehicles used for transport. Driver is not a NIMS typed position. 2. A driver may be one of the team members, depending on the vehicle and the team member's driving credentials. 3. Logistics Specialist is not a NIMS typed position.

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COMPONENT	TYPE 1	TYPE 2	TYPE 3	TYPE 4	NOTES
MINIMUM CAPACITY PER TEAM	<p>Radiological decontamination:</p> <ol style="list-style-type: none"> 1. Team can sustain one line of animals moving from station to station, with different personnel at each station 2. Minimum capacity of an estimated 10-12 animals per hour per line, with periodic rotation of some personnel 3. Capacity depends on environmental temperature and conditions 4. Due to PPE, ergonomic, and environmental challenges, team should include three rotating shifts of personnel to sustain operations continuously for 12 hours 5. Team may be able to sustain a second or even a third line, including line(s) for owners who volunteer to decontaminate their own animals, depending on jurisdictional and incident policies 6. Total minimum capacity estimated at 144 animals per shift, per line 	<p>Radiological decontamination:</p> <ol style="list-style-type: none"> 1. Minimum capacity of an estimated 5 animals per hour with periodic rotation of some personnel 2. Capacity depends on environmental temperatures and conditions 3. Team may be able to sustain a second line for owners who volunteer to decontaminate their own animals, depending on jurisdictional and incident policies 4. Total minimum capacity of up to 50 animals per shift, not including pets decontaminated by owners 	<p>Floodwater or debris decontamination:</p> <ol style="list-style-type: none"> 1. Single line of decontamination with a capacity of approximately 4-6 animals per hour or 50 animals per day 	Not Specified	<p>For radiological incidents, not every animal will need decontamination. Cited numbers emphasize animals that need decontamination and not those that the team simply returns to their owners.</p>

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DECONTAMINATION EQUIPMENT PER TEAM	Same as Type 2, PLUS: 1. One additional set of decontamination pools and tables 2. Two additional radiation monitoring devices (dosimeters)	1. 500-gallon water tank 2. Water heater capable of supporting two lines of decontamination 3. Water hoses and sprayers 4. Shallow decontamination pools (2) 5. Elevated animal handling tables for use inside pools (2) 6. Drain hoses or sump pumps 7. Tents (3-4) for intake area, animal holding area, and responder recovery area 8. Powered air purifying respirators or filter respirators 9. Personal dosimeter for each team member 10. Handheld radiation monitors (minimum 2) 11. Power cords and surge protectors 12. Veterinary diagnostic equipment (stethoscope, light, thermometers, etc.) 13. Animal cages for dogs and cats 14. Generator and fuel capable of supporting operations for a minimum of 24 hours	1. 250-gallon water tank 2. Water heater capable of supporting a single line of decontamination 3. Water hoses and sprayers 4. Shallow decontamination pool 5. Elevated animal handling table for use inside pool 6. Drain hoses or sump pumps 7. Tents or canopies (2-3) for intake area, animal holding area, and responder recovery area 8. Animal cages for dogs and cats 9. Generator and fuel capable of supporting operations for a minimum of 24 hours	Not Specified	1. Requestor and provider discuss equipment needs and what supplies the requestor will provide. 2. If location has running water or requestor can provide water, requestor may waive water requirements
PERSONAL PROTECTIVE EQUIPMENT (PPE) EQUIPMENT PER TEAM MEMBER	Same as Type 2	Same as Type 3, PLUS: 1. Individual dosimeters for every team member 2. N-100 or better respirator	PPE is mission specific and may vary by work environment; it includes: 1. Protective footwear 2. Protective clothing for skin exposure 3. Eye and ear protection 4. Respirators 5. Gloves 6. Masks	Not Specified	The following regulation addresses PPE: Occupational Safety and Health Administration (OSHA) 29 Code of Federal Regulations (CFR) Part 1910.132: Personal Protective Equipment.
COMMUNICATIONS EQUIPMENT PER TEAM MEMBER	Same as Type 2	Same as Type 3	Cell phone	Not Specified	Not Specified

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TRANSPORTATION EQUIPMENT PER TEAM	Same as Type 2	Same as Type 3	1. Vehicles for transporting equipment and supplies, based on mission 2. Passenger vehicles, as appropriate for mission	Not Specified	Not Specified

NOTES

1. Nationally typed resources represent the minimum criteria for the associated component and capability.
2. Companion animal decontamination teams are challenging to equip, train, and maintain. No two teams have identical equipment, but the above descriptions provide a common denominator for team development and deployment. Additional research in animal decontamination, particularly for radiological incidents, can help in identifying equipment and protocols to improve team throughput.
3. See National Alliance of State Animal and Agricultural Emergency Programs (NASAAEP) Animal Decontamination Best Practices for additional information.

REFERENCES

1. FEMA, NIMS 509: Animal Emergency Response Team Leader
2. FEMA, NIMS 509: Veterinarian
3. FEMA, NIMS 509: Veterinary Assistant
4. FEMA, NIMS 509: Animal Behaviorist
5. FEMA, NIMS 509: Animal Decontamination Specialist
6. FEMA, NIMS 509: Animal Care and Handling Specialist
7. FEMA, National Incident Management System (NIMS), October 2017
8. FEMA Radiological Emergency Preparedness (REP) Program Manual, FEMA P-1028, 2016
9. Occupational Safety and Health Administration (OSHA) 29 Code of Federal Regulations (CFR) Part 1910.132: Personal Protective Equipment, latest edition adopted
10. National Alliance of State Animal and Agricultural Emergency Programs (NASAAEP) Animal Decontamination Best Practices, 2012